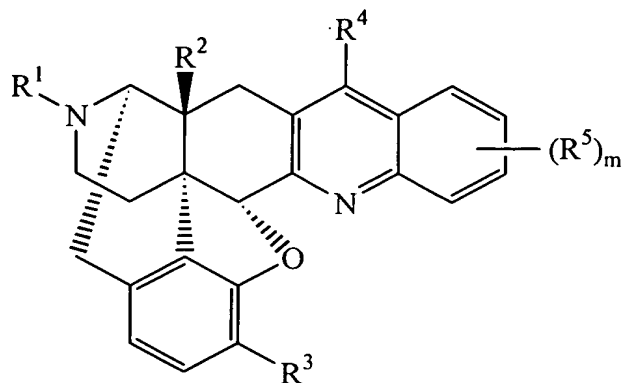


## CLAIMS

1. A therapeutic or prophylactic agent for frequent urination or urinary incontinence, comprising as an effective ingredient a quinolinomorphinan derivative of the Formula (I):



(I)

5 (wherein  $R^1$  is hydrogen,  $C_1$ - $C_5$  alkyl,  $C_4$ - $C_7$  cycloalkylalkyl,  $C_5$ - $C_7$  cycloalkenylalkyl,  $C_6$ - $C_{12}$  aryl,  $C_7$ - $C_{13}$  aralkyl,  $C_2$ - $C_7$  alkenyl,  $C_1$ - $C_5$  alkanoyl, furan-2-ylalkyl (wherein the number of carbon atoms in the alkyl moiety is 1 to 5), or thiophene-2-ylalkyl (wherein the number of carbon atoms in the alkyl moiety is 1 to 5);

10  $R^2$  and  $R^3$  independently are hydrogen, hydroxy,  $C_1$ - $C_5$  alkoxy,  $C_1$ - $C_5$  alkanoyloxy,  $C_7$ - $C_{13}$  aralkyloxy or  $C_7$ - $C_{13}$  arylcarbonyloxy;  
 $m$  is an integer of 0 to 4;

$R^5(s)$  is(are) substituent(s) on the benzene ring and independently represent(s)  $R^{18}$ , or two  $R^5$ s on adjacent carbon atoms cooperatively represent a fused ring structure A (with the proviso that the remaining 0 to 2  $R^5$ s independently represent  $R^{18}$  or a pair of  $R^5$ s represent another fused ring structure A),

wherein said ring structure A is benzo, indeno, naphtho or pyrido, or  $C_5$ - $C_7$  cycloalkeno, each of which is substituted with 0 to 4  $R^9$ s, or non-substituted dioxoleno;

20  $R^9$  and  $R^{18}$  represent (1) independently fluoro, chloro, bromo, iodo, nitro, hydroxy,

C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>1</sub>-C<sub>5</sub> alkoxy, isothiocyanato, trifluoromethyl, trifluoromethoxy, cyano, phenyl, C<sub>1</sub>-C<sub>3</sub> hydroxyalkyl, SR<sup>6</sup>, SOR<sup>6</sup>, SO<sub>2</sub>R<sup>6</sup>, (CH<sub>2</sub>)<sub>k</sub>CO<sub>2</sub>R<sup>7</sup>, SO<sub>2</sub>NR<sup>7</sup>R<sup>8</sup>, CONR<sup>7</sup>R<sup>8</sup>, (CH<sub>2</sub>)<sub>k</sub>NR<sup>7</sup>R<sup>8</sup>, or (CH<sub>2</sub>)<sub>k</sub>N(R<sup>7</sup>)COR<sup>8</sup> (wherein k is an integer of 0 to 5, R<sup>6</sup> is C<sub>1</sub>-C<sub>5</sub> alkyl, R<sup>7</sup> and R<sup>8</sup> independently are hydrogen, C<sub>1</sub>-C<sub>5</sub> alkyl or C<sub>4</sub>-C<sub>6</sub> cycloalkylalkyl), and/or (2) R<sup>9</sup> and R<sup>18</sup> on adjacent carbon atoms via the fused ring moiety cooperatively form R<sup>9</sup>-R<sup>18</sup> which represents a bridging structure selected from the group consisting of ethano, propano and *o*-benzeno;

R<sup>4</sup> is hydrogen, C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>1</sub>-C<sub>5</sub> hydroxyalkyl, C<sub>6</sub>-C<sub>12</sub> aryl (which may be substituted with one or more substituents R<sup>17</sup>), NR<sup>10</sup>R<sup>11</sup>, OR<sup>12</sup>, COOR<sup>13</sup> or CONR<sup>14</sup>R<sup>15</sup>, or R<sup>4</sup> and R<sup>5</sup> which substitutes on the peri-position cooperatively form R<sup>4</sup>-R<sup>5</sup> that represent a bridging structure selected from the group consisting of N(R<sup>16</sup>)CO, N(R<sup>16</sup>)C(=NH), N(R<sup>16</sup>)CH<sub>2</sub>, *o*-benzeno, ethano, propano and butano; R<sup>17</sup> is fluoro, chloro, bromo, iodo, nitro, amino, hydroxy, C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>1</sub>-C<sub>5</sub> alkoxy, C<sub>1</sub>-C<sub>5</sub> alkanoyloxy, trifluoromethyl, trifluoromethoxy or cyano; R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup> and R<sup>16</sup> independently are hydrogen, C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>4</sub>-C<sub>7</sub> cycloalkylalkyl, C<sub>7</sub>-C<sub>13</sub> aralkyl or C<sub>1</sub>-C<sub>5</sub> alkanoyl, and R<sup>13</sup>, R<sup>14</sup> and R<sup>15</sup> independently are hydrogen, C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>6</sub>-C<sub>12</sub> aryl or C<sub>7</sub>-C<sub>13</sub> aralkyl)

or a pharmaceutically acceptable acid addition salt thereof.

2. A therapeutic or prophylactic agent for frequent urination or urinary incontinence according to claim 1, wherein in Formula (I), R<sup>4</sup> is hydrogen, C<sub>1</sub>-C<sub>5</sub> alkyl or NR<sup>10</sup>R<sup>11</sup>, or R<sup>4</sup> and R<sup>5</sup> which substitutes on the peri-position cooperatively form R<sup>4</sup>-R<sup>5</sup> that represent a bridging structure N(R<sup>16</sup>)CO (wherein R<sup>10</sup>, R<sup>11</sup> and R<sup>16</sup> represent the same meanings as in claim 1).

3. A therapeutic or prophylactic agent for frequent urination or urinary incontinence according to claim 2, wherein in Formula (I), R<sup>1</sup> is C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>4</sub>-C<sub>7</sub> cycloalkylalkyl, C<sub>7</sub>-C<sub>13</sub> aralkyl, furan-2-ylalkyl (wherein the number of carbon atoms in the alkyl moiety is 1 to 5), or thiophene-2-ylalkyl (wherein the number of carbon

atoms in the alkyl moiety is 1 to 5).